CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	NorthWestern Energy Warren to Billings Natural Gas Pipeline Replacement
Proposed Implementation Date:	Summer/Fall 2018
Proponent:	NorthWestern Corporation, dba NorthWestern Energy
Location:	Section 11, Township 1 South, Range 26 East (Yellowstone River – Public Land Trust)
County:	Yellowstone County

I. TYPE AND PURPOSE OF ACTION

NorthWestern Energy (NorthWestern) is working on a project to relocate a segment of the Warren to Billings natural gas pipeline. It currently crosses the Yellowstone River on the South Billings Boulevard Bridge, approximately 4 miles upstream of the proposed new river crossing, and then runs through a developing area of south Billings. This pipeline was installed in 1944 and the continued construction around the pipeline corridor is causing conflicts and encroachments. The intent of the current relocation project is to move away from areas that have a higher risk of third-party damage and encroachment into the right-of-way. In addition, due to the age of the existing pipeline, it cannot be inspected with state of the art internal inspection tools. At this time, NorthWestern is proposing to keep the current pipeline crossing on the South Billings Boulevard Bridge, however, no easement has been issued for this crossing and NorthWestern will need to perfect it.

NorthWestern is proposing to install a new segment of the Warren to Billings pipeline which consists of a 12-inch diameter natural gas pipeline located underneath the navigable riverbed of the Yellowstone River in Section 11-T1S-R26E in Yellowstone County within a new 40’ wide by ±608.54’ long easement encompassing ±0.56 acres. This portion of the Yellowstone River is very braided, so the easement actually has three different segments where it crosses under the current channels of the Yellowstone River as well as islands owned by the city of Billings. These islands were originally federally owned, since they existed at statehood, and were later transferred to the City of Billings. The new section of pipeline will be installed by Horizontal Directional Drilling (HDD) and would be located at least 50’ below the riverbed along most of its length, except for the far north/west end where the depth will be ±36’.

This portion of the Yellowstone River is constrained on the east side by a steep rimrock face and armoring/rip rap on the west side of the river. This reach of the Yellowstone River contains a large island which existed at statehood and was therefore federally owned. The ownership of the island was transferred to the City of Billings in the early 1970s. The main channel of the river has gradually shifted from the channel that is east/south of the island to the channel that is north/west of the island. It is also important to note that the municipal water intake for the City of Billings is located approximately 0.4 miles downstream of the proposed easement. There is an existing Plains All American Pipeline petroleum pipeline located between 65’ to 71’ downstream of the proposed new easement. The Plains pipeline was installed in 1996/1997. In addition, Phillips 66 Pipeline installed a new HDD petroleum pipeline approximately 350’ downstream of the proposed NorthWestern easement in 2015. The proposed NorthWestern natural gas line and the Plains All American Pipeline and Phillips 66 Seminoe pipeline will run parallel to each other across the Yellowstone River.

The Horizontal Directional Drilling (HDD) will utilize an entry point on the west side of the Yellowstone River in Mystic Park. The new pipeline will exit on the east side on the river on privately-owned land. The HDD technique will allow the new pipeline to be located below river scour and decrease surface disturbance. Additionally, it will minimize areas of open-cut trenching to areas above the high-water mark that connect the new pipeline segment to the new overland pipeline. Additionally, the easement will provide for state oversight of their pipeline monitoring, as has been required of all other new navigable river pipeline easements.

NorthWestern has been working with the City of Billings to obtain an easement from them on the city-owned islands as well as other city ownership on the shore, near the water treatment plant. The DNRC Southern Land Office (SLO) has been in contact with the City and we have been coordinating our processes so that the easements move forward together, as the ownership is comingled as the pipeline crosses the Yellowstone.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The DNRC did not perform any formal public scoping for this project. Additionally, the SLO has been in contact with the City of Billings regarding the proposed new easement and the existing pipeline as it crosses through both City and State ownership. The City easement will need to be approved by the City Council at a regular meeting.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Yellowstone Conservation District: 310 Permit (Approved)
US Army Corps of Engineers: Section 404 Permit (Pending)
Yellowstone County Floodplain Permit (No Permit Required)
City of Billings Floodplain Permit (Pending)
City of Billings Pipeline Easement (Pending)
MT Department of Environmental Quality: Section 318 and SWPPP (318 Approved, SWPPP Pending)

3. ALTERNATIVES CONSIDERED:

No Action Alternative: Deny the request to issue an easement for a new 12-inch natural gas pipeline under the bed of the Yellowstone River via Horizontal Directional Drilling (HDD).

Proposed Alternative: Issue a 30-year term easement to permit the installation of a new 12-inch natural gas pipeline under the bed of the Yellowstone River through the use of Horizontal Directional Drilling (HDD). Utilization of the HDD method would permit the pipeline to be installed approximately 50’ beneath the riverbed.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter “NONE” If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The proposed alternative would permit the use of Horizontal Directional Drilling (HDD) to install a new segment of pipeline approximately 50’ below the bed of the Yellowstone River. The project would have an entry point in Mystic Park, which is owned by the city of Billings and exit on private land on the east side of the river. Any impacts to state-owned land would be from the boring of the new pipeline route under the riverbed. No significant adverse impacts are expected to geology and soil quality by implementing the proposed alternative.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed alternative would allow for the new pipeline segment to be installed via Horizontal Directional Drilling (HDD). The use of HDD would limit the adverse impacts to water quality and quantity by allowing for the facility to be located approximately 50 feet below the bed of the Yellowstone River in a layer of shale bedrock which would provide additional protection for the pipeline from scouring of the river bottom. The easement is proposed to be located approximately 0.4 miles upstream of the Billings municipal water intake and the installation of a deep pipeline with protection from scouring would reduce the chances of a rupture and the potential contamination of the municipal water system.

Short term impacts from the construction/drilling operation are not expected to have significant adverse impacts. NorthWestern will be required to follow Montana Best Management Practices (BMP) for stormwater runoff, as well as permitting requirements from the Montana Department of Environmental Quality. This would include installing erosion control and sediment control devices to prevent topsoil from reaching the river.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The proposed alternative would require the operation of construction machinery including but not limited to a HDD drill rig, trackhoe and miscellaneous support trucks, including a water truck. Not all machinery would be operating at the same time. The entire project is expected to last approximately 4-6 weeks, with the actual HDD process taking about 2-4 weeks of that timeframe. The proposed alternative would be of a relatively short duration and is not expected to have significant long term adverse impacts to air quality.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The proposed alternative would result in a new pipeline segment being bored ±50' under the existing riverbed and would not result in any vegetation disturbance on state-owned land. No significant impacts to vegetation cover, quantity or quality are expected by implementing the proposed alternative.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors and songbirds may traverse this area. The noise from the drill rig could disperse or cause wildlife to temporarily avoid the area. No significant impacts to terrestrial, avian and aquatic life and habitats are expected to occur as a result of implementing the proposed alternative.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

A proposed project area search of the Montana Natural Heritage Program database identified fourteen animals listed as a species of concern or threatened species: Great Blue Heron, Peregrine Falcon, Pinyon Jay, Veery, Loggerhead Shrike, Brewer's Sparrow, Yellowstone Cutthroat Trout, Sauger, Little Brown Myotis, Spotted Bat, Spiny Softshell, Greater Short-horned Lizard, Plains Hog-nosed Snake, Western Milksnake, Snapping Turtle and Plains Spadefoot.

The proposed action would result in a new pipeline being bored under the state-owned riverbed and would not result in any surface disturbance on state-owned land. The project would have an entry point in Mystic Park, which is owned by the city of Billings and exit on private land on the east side of the river. The Billings municipal water treatment plant is located immediately to the north of Mystic Park, along with a scattering of residential and commercial uses to the west, beyond the park. Due to the relatively short duration of the project, the proposed action is not expected to have a significant long-term adverse impact on any of the species listed above.

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10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because the area of potential effect on state land is beneath the bed of the Yellowstone River, no additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

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11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The pipeline crosses the Yellowstone River near the northeast corner of Mystic Park, approximately 0.4 miles upstream of the Billings municipal water intake and water treatment plant. The HDD entry point will be in Mystic Park on the west side of the Yellowstone River and will exit on the east side on privately owned land. The proposed activities will be very visible to users of Mystic Park and the nearby residences and businesses.

Based on previous HDD requests, it is estimated that noise levels from the proposed action will be between 65-70 dBA. This noise level is loud enough that it could impact speech for park and recreation users. The closest residences are approximately 400' west of the HDD entry point and the hours of operation are expected to be from 7am-7pm, 6 days per week for approximately two weeks of drilling. The remaining construction time would be setup and takedown along with a week of tying in the new line with the new pipeline on each side of the shore. There would also be work on the eastern side of the river, which is predominantly grazing land.

Implementation of the Proposed Alternative would cause minor temporary short term impacts to aesthetics during the pipeline construction due to visual impacts and noise from the HDD drill rig and other heavy equipment. The actual HDD process is expected to take approximately 2 weeks and the entire project about 4-6 weeks. The proposed action would add to the existing noise levels, but this temporary addition is not expected to cause a significant adverse impact.

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12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on environmental resources of land, water or energy.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

Other permits that are required by other local, state or federal agencies or departments for the proposed project are listed above in Section 2 of this EA. There are no other known future government actions planned for this reach of Public Land Trust property.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Implementation of the Proposed Alternative would provide for increased health and safety by taking the current pipeline that has some risk of third party damage and re-routing it to a more remote location.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

Implementation of the Proposed Alternative would allow NorthWestern to replace a segment of their natural gas pipeline that is vulnerable to third-party interference and is too old for modern in-pipeline tool inspections. The new pipeline segment would improve these conditions by relocating it to a relatively remote area.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

Implementation of the Proposed Alternative would not have a significant impact to quantity and distribution of employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Implementation of the Proposed Alternative is not expected to have a significant impact on local and state taxes since it would only relocate a portion of the existing Warren to Billings natural gas pipeline.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on the demand for government services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Implementation of the Proposed Alternative will not conflict with any locally adopted plans.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This section of the Yellowstone River is fairly actively used and there is a Fishing Access site at Coulson Park, which is located approximately 1.7 miles downstream of the pipeline crossing and another one further downstream another one-half mile on the east shoreline at the Lockwood water treatment plant site, near the US Highway 87 Bridge. The project would likely close this portion of the River during the 2-week HDD process and may also result in a partial closure of Mystic Park around the area where the drill rig and other equipment would be located. This project would also most likely require a closure of the bike-pedestrian trail that appears to be less than one hundred feet of the HDD entry point in Mystic Park.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

Implementation of the Proposed Alternative is not expected to have a significant adverse impact to density and distribution of population and housing.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on social structures and mores.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

Implementation of the Proposed Alternative is not expected to have a significant adverse impact on cultural uniqueness or diversity.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The State will benefit by getting a fee of $5,530 ($150/rod x 36.88 rods) for the new 30-year HDD easement. NorthWestern Energy also paid a $50 application fee. The Public Lands Trust is the beneficiary of this payment since it involves a navigable river.

EA Checklist Prepared By:	**Name:**	Jeff Bollman, AICP	**Date:**	11 June 2018
	Title:	Area Planner, Southern Land Office		

V. FINDING

25. ALTERNATIVE SELECTED:

The Proposed Alternative has been selected and it is recommended that a 30-year term easement be granted to NorthWestern Energy for the purpose of installing a 12-inch diameter natural gas pipeline underneath the navigable riverbed of the Yellowstone River. This new pipeline segment will be installed by Horizontal Directional Drilling (HDD) and located approximately 50' below the river bed.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

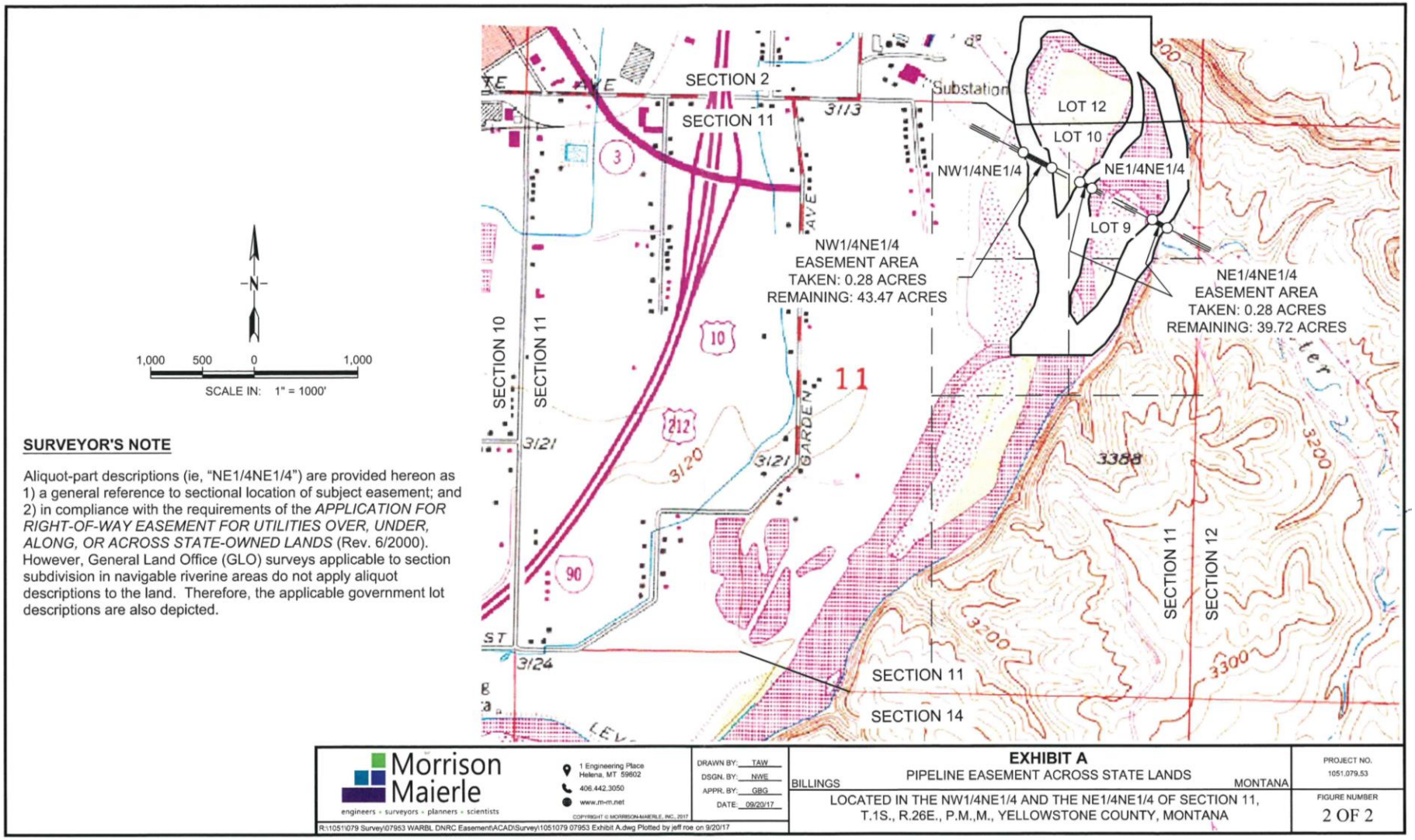
The potential for significant adverse impacts to Public Trust Lands (the navigable riverbed) are reduced by the nature of the Horizontal Directional Drilling technique that will be utilized and the depth (±50') beneath the existing riverbed that will be achieved. Many potential impacts listed above are short term and correspond with the construction project. There are no natural features or nearby species of concern noted that are expected to produce long term adverse impacts from the proposed alternative.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

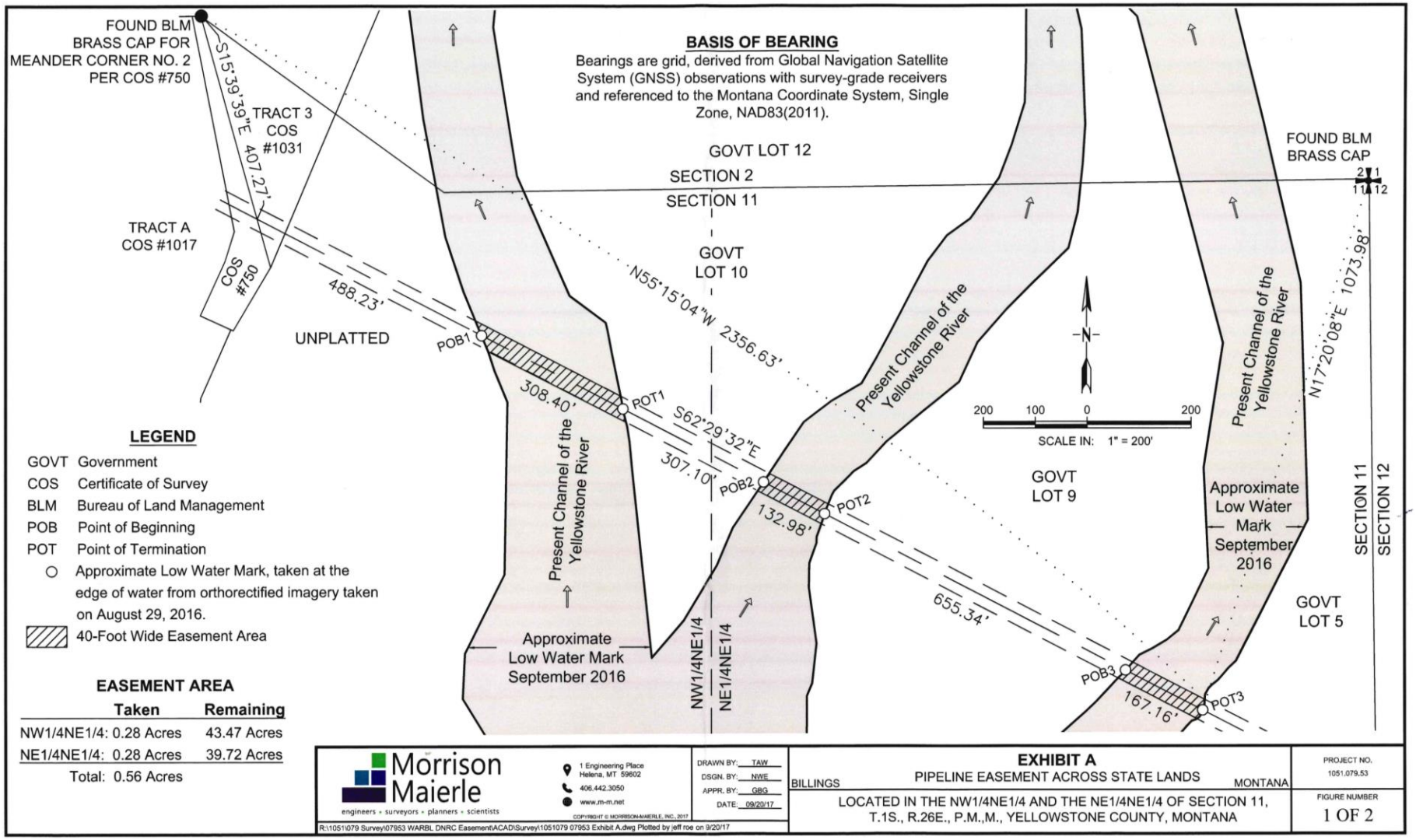
☐	EIS	☐	More Detailed EA	☒	No Further Analysis

EA Checklist Approved By:	**Name:**	Matthew Wolcott
	Title:	Area Manager, Southern Land Office
Signature: Matt Wolcott		**Date**: June 12, 2018

Attachment A – Location Map of Proposed Warren to Billings Pipeline Project Yellowstone River Crossing



Attachment B – Easement Detail of Proposed Yellowstone River Crossing



Attachment C – Warren to Billings Pipeline Easement Plan and Boring Profile